



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,290	03/21/2001	Michael F. Culbert	APL1P211/P2656	6108

22434 7590 07/14/2006

BEYER WEAVER & THOMAS, LLP
P.O. BOX 70250
OAKLAND, CA 94612-0250

EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,290

Applicant(s)

CULBERT, MICHAEL F.

Examiner

Dave Czekaj

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

On pages 7-8, applicant argues that Tahara fails to disclose using the edit track for compressing the video data. While the applicant's points are understood, the examiner respectfully disagrees. See for example Tahara column 11, lines 30-35. There Tahara discloses that the V-phase and H-phase variables make up part of the MPEG_ES_editing information. Tahara discloses in column 15, lines 27-37, that the V-phase and H-phase indicate the first line to be encoded, or compressed, in a frame. Therefore the MPEG_ES_editing information, or edit track, is used for compressing the video data. Therefore the rejection has been maintained.

On page 9, applicant argues that Tahara fails to disclose using the edit track to create a motion or difference vector. While the applicant's points are understood, the examiner respectfully disagrees. See for example Tahara column 19, lines 1-25. There Tahara discloses the use of f_codes for defining a search range, or window, for searching motion vectors. The examiner notes that by searching for motion vectors, Tahara is determining/creating a motion vector for the current frame. Therefore the rejection has been maintained.

On page 9, applicant argues that it would not have been obvious to combine Tahara with Wang. While the applicant's points are understood, the examiner respectfully disagrees. Tahara discloses in many instances (see figure 6) storing video via buffers or memories before being sent to a user. Wang discloses an apparatus that can easily and effectively search stored video. Since Tahara discloses processing and

storing video and Wang discloses processing the stored video, the combination is deemed proper. Therefore the rejection has been maintained.

On pages 9-10, applicant argues that Wang fails to disclose creating an edit object. While the applicant's points are understood, the examiner respectfully disagrees. See for example Wang column 16, lines 50-65. There Wang discloses the creation of a rectangle, or edit object, by using a rectangular tool to define an area for an edit to occur. Therefore the rejection has been maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 11-14, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tahara et al. (6671323), (hereinafter referred to as "Tahara").

Regarding claims 1, 11, and 19, Tahara discloses an apparatus that relates to an encoding and decoding system (Tahara: column 1, lines 6-9). This apparatus comprises "accessing the edit track to use data in the edit track during compressing" (Tahara: figures 1 and 4, column 11, lines 44-48, column 22, lines 19-34, wherein the edit track is the MPEG_ES_editing_information, the compressing is the encoding) and "an edit track records editing steps made by a

user, wherein the recorded editing steps are used for compressing the video data (Tahara: figures 10-16, 24-25, column 9, lines 49-54, column 12, lines 31-34, column 17, lines 58-61, wherein the history data and user data contain the recorded editing steps).

Regarding claims 2 and 12, Tahara discloses “using information in the edit track to determine the bit resolution for a region defined in the track” (Tahara: column 13, lines 52-67, wherein the horizontal_size_value, vertical_size_value, aspect_ratio_information, and bit_rate_value are used to determine the bit resolution for a region).

Regarding claims 3 and 13, Tahara discloses “using motion information in the edit track to create a motion vector” (Tahara: column 19, lines 4-26, wherein the motion information is the f_code[0][1], f_code[1][0], f_code[1][1], and concealment_motion_vectors).

Regarding claims 4 and 14, Tahara discloses “using information in the edit track to create a difference vector” (Tahara: column 19, lines 4-26, wherein the motion vector is a difference vector between two frames).

Regarding claim 17, Tahara discloses “an edit track reader for accessing data within the edit track and generating instructions based on the data within the track” (Tahara: column 22, lines 19-34, column 23, lines 31-34, wherein the controller, variable length decoder, and variable length encoder access the data and the instructions are used to control the various circuits).

Regarding claims 18 and 20, Tahara discloses "the video compressor is an MPEG video compressor that provides compression with a single encoding" (Tahara: figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6671323), (hereinafter referred to as "Tahara") in view of Wang et al. (5802361), (hereinafter referred to as "Wang").

Regarding claims 5 and 15, note the examiners rejection for claim 1, and in addition, claims 5 and 15 differ from claim 1 in that claims 5 and 15 further require using information in the edit track to determine a number of I-frames used for compression. Wang teaches that searching video has proven to be difficult and time consuming (Wang: column 3, lines 29-30). To help alleviate this problem, Wang discloses "using information in the edit track to determine a number of I-frames used for compression" (Wang: figure 3, column 11, lines 19-29, wherein the number of I-frames is located in the scene change detection file. Scene change sequences typically begin with an I frame. Therefore having an information file that contains scene changes would also contain the number of I-frames used). Therefore, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to take the apparatus disclosed by Tahara and add the I-frame determination taught by Wang in order to obtain an apparatus that can easily search different video segments.

Regarding claims 6, 7, and 16, Wang discloses "creating a track of edited video data" (Wang: figure 5h, wherein it is shown that a user can change or edit the video data by adding a bookmark) and "creating at least one object in the edit track, wherein the edit object defines a region that has been edited and a type of edit" (Wang: column 16, lines 53-65, wherein the object is the rectangle, which defines the region within in the image, the type of edit is represented by the changing icon).

Regarding claim 8, Tahara discloses "using text information in the edit track to increase bit resolution of quantization of a pixel block to improve resolution of text provided by the text information" (Tahara: column 14, lines 8-19, wherein the text information are the quantization matrices which increase/decrease bit resolution. The examiner notes that the increase/decrease in the bit resolution will cause any subsequent video, text, or image data to increase/decrease in quality).

Regarding claim 9, Wang discloses "using blend information in the edit track to decrease the bit resolution of a pixel block" (Wang: figures 3 and 5d, column 15, lines 53-65, wherein the user can change the red, green and blue color values yielding a blending technique to obtain the desired color. Decreasing the color attributes would decrease the resolution of a pixel block).

Regarding claim 10, Wang discloses "the edit track defines a region within which a video edit has occurred and the type of edit that occurred within the region" (Wang: figures 3 and 9, wherein the frame difference, scene change, and segment determine the region and the color histogram and texture determine the type of edit).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone

Art Unit: 2621

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJC

Mehrdad Dastouri
MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600